



APPLICANT FACSIMILE OF FORM PTO-1449 JUL 29 1992 7:00		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO GFN-5321DV	SERIAL NO 10/090,879
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)					
APPLICANT William S. Somers et				GROUP	
FILING DATE March 4, 2002				1631	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
A1	5,863,973	12/98	Kakefuda et al.	435	4	

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

A2	Abrahams, J.P. et al., "Methods used in the structure determination of bovine mitochondrial F1 ATPase," <i>Acta Cryst.</i> , D52:30-42 (1996)		
A3	Andersson, A. et al., "Crystal structure of the ternary complex of 1,3,8-trihydroxynaphthalene reductase from <i>Magnaporthe oryzae</i> with NADPH and an active-site inhibitor," <i>Structure</i> , 4(10):1161-70 (1996)		
A4	Andrianopoulos, K. et al., "Identification of the fucose synthetase gene in the colanic acid gene cluster of <i>Escherichia coli</i> K-12," <i>J. Bacteriol.</i> , 180(4):998-1001 (1998)		
A5	Bauer, A.J. et al., "The molecular structure of UDP-galactose 4-epimerase from <i>Escherichia coli</i> determined at 2.5 Å resolution," <i>Proteins</i> , 2(4):372-81 (1992)		
A6	Bonin, C. P. et al., "The MUR1 gene of <i>Arabidopsis thaliana</i> encodes an isoform of GDP-D-mannose-4,6-dehydratase, catalyzing the first step in the de novo synthesis of GDP-L-fucose," <i>Proc Natl Acad Sci U S A</i> , 94(5):2085-90 (1997)		
A7	Branden, C. et al., "Determination of protein structures," in <i>Introduction to Protein Structure</i> , Garland Publishing, Inc. Chapter 17 pp. 269-285 (1994)		
A8	Breton, R. et al., "The structure of a complex of human 17β-hydroxysteroid dehydrogenase with estradiol and NADP ⁺ identifies two principal targets for the design of inhibitors," <i>Structure</i> , 4(8):905-15 (1996)		
A9	Broschat, K.O. et al., "Purification and characterization of GDP-D-mannose 4,6-dehydratase from porcine thyroid," <i>Eur. J. Biochem.</i> , 153(2):397-401 (1985)		
A10	Chang, S. et al., "An epimerase-reductase in L-fucose synthesis," <i>J. Biol. Chem.</i> , 263(4):1693-7 (1988)		
A11	De La Fortelle, E. de et al., "Maximum-likelihood heavy atom parameter refinement for multiple isomorphous replacement and multiwavelength anomalous diffraction methods," <i>Methods Enz.</i> , 276(part B):472-494 (1997)		
A12	Ensor, C.M. et al., "Bacterial expression and site-directed mutagenesis of two critical residues (tyrosine-151 and lysine-155) of human placental NAD(+)-dependent 15-hydroxyprostaglandin dehydrogenase," <i>Biochim. Biophys. Acta</i> , 1208(1):151-6 (1994)		
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APPLICANT FACSIMILE OF FORM PTO-1449 REV 1-80		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. GFN-5321DV	SERIAL NO. 10/090,879
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B1	Ensor, C.M. et al., "Site-directed mutagenesis of the conserved serine 138 of human placental NAD+-dependent 15-hydroxyprostaglandin dehydrogenase to an alanine results in an inactive enzyme," <i>Biochem. Biophys. Res. Commun.</i> , 220(2):330-3 (1996)
B2	Etzioni, A. et al., "Brief report: recurrent severe infections caused by a novel leukocyte adhesion deficiency," <i>N. Engl. J. Med.</i> , 327(25):1789-92 (1992)
B3	Frey, P.A., "Complex pyridine nucleotide-dependent transformations," in <i>Pyridine Nucleotide Coenzymes: Chemical, Biochemical, and Medical Aspects</i> , Dolphin, D. et al. (Eds.) pp. 461-511, John Wiley and Sons, New York (1987)
B4	Ghosh, D. et al., "Three-dimensional structure of holo 3 alpha,20 beta-hydroxysteroid dehydrogenase: a member of a short-chain dehydrogenase family," <i>Proc. Natl. Acad. Sci. U S A.</i> , 88(22):10064-8 (1991)
B5	Ghosh, D. et al., "Structure of human estrogenic 17 beta-hydroxysteroid dehydrogenase at 2.20 A resolution," <i>Structure</i> , 3(5):503-13 (1995)
B6	Ginsberg, V., "Studies on the biosynthesis of guanosine diphosphate L-fucose," <i>J. Biol. Chem.</i> , 236:2389-2393 (1961)
B7	Hulsmeyer, M. et al., "Crystal structure of cis-biphenyl 2,3-dihydrodiol-2,3-dehydrogenase from a PCB degrader at 2.0 A resolution," <i>Protein Sci.</i> , 7(6):1206-93 (1998)
B8	Jornvall, H. et al., "Short-chain dehydrogenases/reductases (SDR)," <i>Biochemistry</i> , 34(18):6003-13 (1995)
B9	Kansas, G.S., "Selectins and their ligands: current concepts and controversies," <i>Blood</i> , 88(9):3259-97 (1996)
B10	Karsan, A. et al., "Leukocyte Adhesion Deficiency Type II is a generalized defect of de novo GDP-fucose biosynthesis. Endothelial cell fucosylation is not required for neutrophil rolling on human nonlymphoid endothelium," <i>J. Clin. Invest.</i> 101(11):2438-45 (1998)
B11	Kiefer, P.M. et al., "Altered structural and mechanistic properties of mutant dihydropteridine reductases," <i>J. Biol. Chem.</i> , 271(7):3437-44 (1996)
B12	Kraulis, P.J., "Molscript: a program to produce both detailed and schematic plots of protein structures," <i>J. Appl. Cryst.</i> , 24:946-950 (1991)
B13	Lesk, A.M., "NAD-binding domains of dehydrogenases," <i>Curr. Opin. Struct. Biol.</i> , 5(5):775-83 (1995)
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APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-85	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. GFN-5321DV	SERIAL NO. 10/090,878
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C1	Liu, H.-W. et al., "Pathways and mechanisms in the biosynthesis of novel deoxysugars by bacteria," <i>Annu. Rev. Microbiol.</i> , 48:223-56 (1994)
C2	Liu, H.-W. et al., "Mechanistic roles of tyrosine 149 and serine 124 in UDP-galactose 4-epimerase from <i>Escherichia coli</i> ," <i>Biochemistry</i> , 36(35):10675-84 (1997)
C3	Mergaert, P. et al., "The nodulation gene nolK of <i>Azorhizobium caulinodans</i> is involved in the formation of GDP-fucose from GDP-mannose," <i>FEBS Lett.</i> , 409(2):312-6 (1997)
C4	Merrit, E.A. et al., "Raster3D version 2.0: a program for photorealistic molecular graphics," <i>Acta Cryst.</i> , D50:869-873 (1994)
C5	Mosimann, S. et al., "A critical assessment of comparative molecular modeling of tertiary structures of proteins," <i>Proteins</i> , 23(3):304-17 (1995)
C6	Nakajima, K. et al., "Crystal structures of two tropinone reductases: different reaction stereospecificities in the same protein fold," <i>Proc. Natl. Acad. Sci. U. S. A.</i> , 95(9):4876-81 (1998)
C7	Obeid, J. et al., "Tyr-179 and Lys-183 are essential for enzymatic activity of 11 beta-hydroxysteroid dehydrogenase," <i>Biochem. Biophys. Res. Commun.</i> , 188(1):222-7 (1992)
C8	Oppermann, U.C. et al., "Active site directed mutagenesis of 3 beta/17 beta-hydroxysteroid dehydrogenase establishes differential effects on short chain dehydrogenase/reductase reactions," <i>Biochemistry</i> , 36(1):34-40 (1997)
C9	Oths, P.J. et al., "Stereochimistry and mechanism of the GDP-mannose dehydratase reaction," <i>Carbohydr. Res.</i> , 198(1):91-100 (1990)
C10	Otwinowski, Z. et al., "Processing of X-rays diffraction data collected in oscillation mode," <i>Methods Enzymol.</i> , 276:307-326 (1997)
C11	Persson, B. et al., "Short-chain dehydrogenases/reductases" in <i>Enzymology and Molecular Biology of Carbonyl Metabolism</i> , Vol. 5, Weiner et al. (Eds.), pp. 383-395. Plenum Press, New York (1995)
C12	Rafferty, J.B. et al., "Common themes in redox chemistry emerge from the X-ray structure of oilseed rape (<i>Brassica napus</i>) enoyl acyl carrier protein reductase," <i>Structure</i> , 3(9):927-38 (1995)
C13	Somers, W.S. et al., "GDP-fucose synthetase from <i>Escherichia coli</i> : structure of a unique member of the short-chain dehydrogenase/reductase family that catalyzes two distinct reactions at the same active site," <i>Structure</i> , 6(12):1601-12 (1998)
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APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-90	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY Docket NO GFN-5321DV	SERIAL NO 10/090,87
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D1	Stevenson, G. et al., "Organization of the Escherichia coli K-12 gene cluster responsible for production of the extracellular polysaccharide colanic acid," <i>J. Bacteriol.</i> , 178(16):4885-93 (1996)
D2	Sturla, L. et al., "Expression, purification and characterization of GDP-D-mannose 4,6-dehydratase from Escherichia coli," <i>FEBS Lett.</i> , 412(1):126-30 (1997)
D3	Sturla, L. et al., "Defective intracellular activity of GDP-D-mannose 4,6-dehydratase in leukocyte adhesion deficiency type II syndrome," <i>FEBS Lett.</i> , 429(3):274-8 (1998)
D4	Sullivan, F.X. et al., "Molecular cloning of human GDP-mannose 4,6-dehydratase and reconstitution of GDP-fucose biosynthesis in vitro," <i>J. Biol. Chem.</i> , 273(14):8193-202 (1998)
D5	Swanson, B.A. et al., "Identification of lysine 163 as a functionally important residue in UDP-galactose 4-epimerase from Escherichia coli," <i>Biochemistry</i> , 32(48):13231-5 (1993)
D6	Tanaka, N. et al., "Crystal structure of the ternary complex of mouse lung carbonyl reductase at 1.8 Å resolution: the structural origin of coenzyme specificity in the short-chain dehydrogenase/reductase family," <i>Structure</i> , 4(1):33-43 (1996)
D7	Tanaka, N. et al., "Crystal structures of the binary and ternary complexes of 7 alpha-hydroxysteroid dehydrogenase from Escherichia coli," <i>Biochemistry</i> , 35(24):7715-30 (1996)
D8	Tapia, A. et al., "Computer assisted simulations and molecular graphics methods in molecular design. 1. Theory and applications to enzyme active-site directed drug design," <i>Molecular Engineering</i> , 3:377-414 (1994)
D9	Thoden, J.B. et al., "Molecular structure of the NADH/UDP-glucose abortive complex of UDP-galactose 4-epimerase from Escherichia coli: implications for the catalytic mechanism," <i>Biochemistry</i> , 35(16):5137-44 (1996)
D10	Thoden, J.B. et al., "High-resolution X-ray structure of UDP-galactose 4-epimerase complexed with UDP-phenol," <i>Protein Sci.</i> , 5(11):2149-61 (1996)
D11	Thoden, J.B. et al., "Crystal structures of the oxidized and reduced forms of UDP-galactose 4-epimerase isolated from Escherichia coli," <i>Biochemistry</i> , 35(8):2557-66 (1996)
D12	Thoden, J.B. et al., "Structural analysis of UDP-sugar binding to UDP-galactose 4-epimerase from Escherichia coli," <i>Biochemistry</i> , 36(21):6294-304 (1997)

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